

# 2-599691-4 | C-024-CA-8W-M24BK/40G/GY

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Fiber indoor/outdoor Cable, Armored LSZH, G.652.D and G.657.A1, 24 fiber, loose tube, gel-filled

## Product Classification

<b>Regional Availability</b>	Australia/New Zealand   EMEA
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber indoor/outdoor cable
<b>Product Series</b>	C-CA

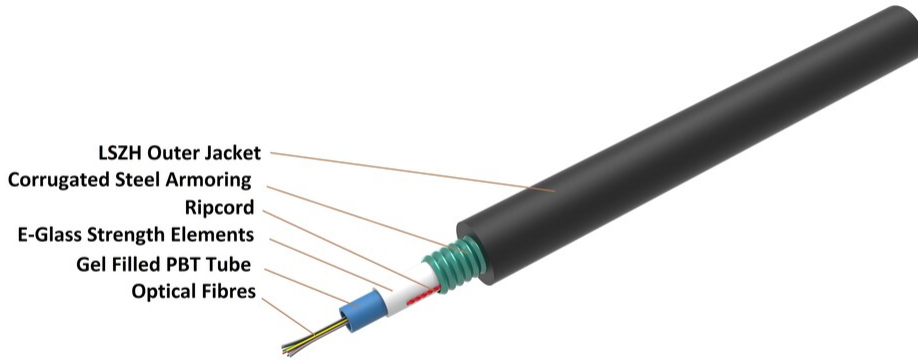
## General Specifications

<b>Armor Type</b>	Corrugated steel
<b>Cable Type</b>	Loose tube
<b>Subunit Type</b>	Gel-filled
<b>Jacket Color</b>	Black
<b>Jacket Marking</b>	Meters
<b>Jacket Marking Method</b>	Inkjet
<b>Jacket Marking Text</b>	COMMSCOPE GB SYSTEM F.O. CABLE X-599691-4 CSA GEL LOOSE TUBE 24X9/125 OS2 ULSZH (Serial NUMBER) (METRE MARK)
<b>Fibers per Subunit, quantity</b>	24
<b>Total Fiber Count</b>	24

## Dimensions

<b>Buffer Tube/Subunit Diameter</b>	4 mm   0.157 in
<b>Diameter Over Jacket</b>	10.5 mm   0.413 in

## Representative Image



## Material Specifications

**Jacket Material** Low Smoke Zero Halogen (LSZH)

## Mechanical Specifications

**Minimum Bend Radius, loaded** 210 mm | 8.268 in  
**Minimum Bend Radius, unloaded** 160 mm | 6.299 in  
**Tensile Load, long term, maximum** 625 N | 140.506 lbf  
**Tensile Load, short term, maximum** 1200 N | 269.771 lbf  
**Cable Crush Resistance, maximum** 30 N/mm | 171.304 lb/in  
**Compression Test Method** IEC 60794-1-2 E3  
**Impact** 5 N-m | 44.254 in lb  
**Impact Test Method** IEC 60794-1-21 E4  
**Twist** 5 cycles  
**Twist Test Method** IEC 60794-1-21 E7

## Optical Specifications

**Fiber Type** G.652.D and G.657.A1

## Optical Specifications, Wavelength Specific

**Attenuation, maximum** 0.22 dB/km @ 1,550 nm | 0.36 dB/km @ 1,310 nm

## Environmental Specifications

<b>Installation temperature</b>	-20 °C to +70 °C (-4 °F to +158 °F)
<b>Operating Temperature</b>	-20 °C to +70 °C (-4 °F to +158 °F)
<b>Storage Temperature</b>	-20 °C to +75 °C (-4 °F to +167 °F)
<b>Cable Qualification Standards</b>	IEC 60794-1-2
<b>Environmental Space</b>	Buried   Ducted   Indoor/Outdoor   Outdoor
<b>Flame Test Method</b>	IEC 60332-1   IEC 60754-1   IEC 60754-2   IEC 61034-2
<b>Water Penetration</b>	24 h
<b>Water Penetration Test Method</b>	IEC 60794-1 F5

## Environmental Test Specifications

<b>Temperature Cycle</b>	-20 °C to +70 °C (-4 °F to +158 °F)
<b>Temperature Cycle Test Method</b>	IEC 60794-1-2 F1

## Packaging and Weights

<b>Cable weight</b>	151 kg/km   101.467 lb/kft
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## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Below maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



## Included Products

CS-8W-250-EMEA – LightScope ZWP® Singlemode Fiber  
250um

## \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

## LightScope ZWP® Singlemode Fiber



### Product Classification

<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Optical fiber

### General Specifications

<b>Cladding Diameter</b>	125 µm
<b>Cladding Diameter Tolerance</b>	±0.7 µm
<b>Cladding Non-Circularity, maximum</b>	0.7 %
<b>Coating Diameter (Colored)</b>	249 µm
<b>Coating Diameter (Uncolored)</b>	242 µm
<b>Coating Diameter Tolerance (Colored)</b>	±13 µm
<b>Coating Diameter Tolerance (Uncolored)</b>	±5 µm
<b>Coating/Cladding Concentricity Error, maximum</b>	12 µm
<b>Core/Clad Offset, maximum</b>	0.5 µm
<b>Proof Test</b>	689.476 N/mm <sup>2</sup>   100000 psi

### Dimensions

<b>Fiber Curl, minimum</b>	4 m   13.123 ft
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### Mechanical Specifications

<b>Macrobending, 20 mm Ø mandrel, 1 turn</b>	0.75 dB @ 1,550 nm   1.50 dB @ 1,625 nm
<b>Macrobending, 30 mm Ø mandrel, 10 turns</b>	0.25 dB @ 1,550 nm   1.00 dB @ 1,625 nm
<b>Macrobending, 60 mm Ø mandrel, 100 turns</b>	0.05 dB @ 1,550 nm   0.05 dB @ 1,625 nm
<b>Coating Strip Force, maximum</b>	8.9 N   2.001 lbf
<b>Coating Strip Force, minimum</b>	1.3 N   0.292 lbf

# CS-8W-250-EMEA | 250um

**Dynamic Fatigue Parameter, minimum** 20

## Optical Specifications

**Cabled Cutoff Wavelength, maximum** 1250 nm

**Point Defects, maximum** 0.05 dB

**Zero Dispersion Slope, maximum** 0.092 ps/[km-nm-nm]

**Zero Dispersion Wavelength, maximum** 1324 nm

**Zero Dispersion Wavelength, minimum** 1300 nm

## Optical Specifications, Wavelength Specific

**Attenuation, maximum** 0.21 dB/km @ 1,550 nm | 0.24 dB/km @ 1625 nm | 0.25 dB/km @ 1,490 nm | 0.35 dB/km @ 1,310 nm | 0.35 dB/km @ 1,385 nm

**Dispersion, maximum** 18 ps(nm-km) at 1550 nm | 2.2 ps(nm-km) at 1625 nm | 3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm

**Index of Refraction** 1.467 @ 1,310 nm | 1.468 @ 1,550 nm

**Mode Field Diameter** 10.4 μm @ 1,550 nm | 9.2 μm @ 1,310 nm

**Mode Field Diameter Tolerance** ±0.4 μm @ 1310 nm | ±0.5 μm @ 1550 nm

**Polarization Mode Dispersion Link Design Value, maximum** 0.06 ps/sqrt(km)

**Standards Compliance** ITU-T G.652.D | ITU-T G.657.A1

## Environmental Specifications

**Heat Aging, maximum** 0.05 dB/km @ 85 °C

**Temperature Dependence, maximum** 0.05 dB/km

**Temperature Humidity Cycling, maximum** 0.05 dB/km

**Water Immersion, maximum** 0.05 dB/km @ 23 °C

## \* Footnotes

**Temperature Dependence, maximum** Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)

**Temperature Humidity Cycling, maximum** Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity